

inferential anomaly is avoided using OR, with odds of progression (0.83) the reciprocal of that for no progression (1.21), and ARD of 4.1% in favor of Nataluzimab with progression or no progression. For direct comparisons ARD is shown to be consistently estimated with OR but change with framing of effects using RR wherever epidemiological risk differs from trial risk in the comparator arm. **CONCLUSIONS:** Odds ratios allow consistent estimation of absolute risk differences regardless of framing of effects in direct and indirect comparisons. This overcomes inferential anomalies that arise with use of relative risk in such comparisons whenever base risk differs in the jurisdiction of interest from that in trials, or base risk in the common arms differs in indirect comparisons. Consequently, odds ratios avoid selection biases in framing of effects inherent with risk ratios and are suggested as the preferred metric in estimating such risk differences.

PMC61

THE IMPLICIT VALUE OF STATISTICAL LIFE: ESTIMATES DERIVED FROM PUBLIC INTERVENTIONS IMPLEMENTED IN THE NETHERLANDS

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OBJECTIVES: The economic literature suggests the Value of Statistical Life (VSL) as a common measure of efficiency for life saving interventions throughout different societal sectors. Policy decisions in The Netherlands have not yet been explicitly based on this measure, however a trade off between wealth and mortality risk is made implicitly when deciding whether or not to implement a life saving intervention. This study aimed to gain insights into this trade off, referred to as Implicit Value of Statistical Life (IVSL), by means of a retrospective investment analysis of interventions implemented in The Netherlands. **METHODS:** A literature search was conducted to find life saving intervention cases meeting the requirements for a uniform IVSL calculation and additional inclusion criteria. A sample of 10 cases was included in the study and concerned interventions implemented in the water control, consumer safety, transport and health care sector. **RESULTS:** IVSL estimates derived from the cases ranged from €1 to almost €11 million. Differences were most extreme when comparing IVSL estimates of interventions implemented in different societal sectors. However, estimates also varied greatly between interventions in the same sector and even within the same intervention, when critical assumptions were altered. **CONCLUSIONS:** Despite limited comparability of IVSL estimates, our findings suggest that there are great imbalances between societal investments for preventing a statistical death. This highlights the need to develop ways to increase transparency and efficiency of policy decisions by systematically taking the Value of Statistical Life into account. Given the conceptual problems inherent to the IVSL, future research should focus on the potential merit of explicit VSL measures for decision making. Since the consequences of life saving interventions are not restricted to mortality reduction, research should also address the question whether there is a need to incorporate broader health and other consequences of life saving interventions in the measure of efficiency.

PMC62

UNIVERSAL TRANSLATION AND NEUROPSYCHOLOGICAL COMPARISONS OF PATIENTS FROM US-MEXICO BORDER REGION AND SPAIN

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OBJECTIVES: There are two main approaches to questionnaire translation for languages spoken in multiple countries called “universal approach” and “country specific approach”. The universal approach postulates that one translation can be developed via participation and consensus between native speaking translators from various countries where that language is spoken. Demonstrating that the universal approach is possible for questionnaires has been the life work of neuropsychologist Dr. Lidia Artiola Fortuny. **METHODS:** This poster will share the results of a study published in the Journal of the International Neuropsychological Society where participants from the US-Mexico border region (N = 185) and Madrid, Spain (N = 205) were compared on 16 Spanish language neuropsychological measures, with special attention to avoid item content that was specific to one geographic group. Differences in socio-economic, education and health were considered. Samples were drawn from volunteers in each community between the ages of 18 and 76 with 0 to 20 or more years of formal education who claimed Spanish as their first language and demonstrated native fluency in the language. Participants were excluded from the study if they had past neurological, emotional, psychological issues or learning difficulties. **RESULTS:** Analyses of variance were performed to study place of birth effects on performance on each measure. Findings indicate that the populations from Spain and the Borderland obtained similar results for most of the measures. Participants did not report difficulties with the instructions or test items. **CONCLUSIONS:** Dr. Artiola Fortuny asserts that Spanish speaking populations do not differ any more than mainstream English speaking populations such as the United States, England or Australia, and that one should capitalize on the great amount of linguistic overlap across populations that share the Spanish language.

PMC63

SYSTEMATIC REVIEW RELIABILITY: SENSITIVITY AND SPECIFICITY OF ONE VS. TWO REVIEWS

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OBJECTIVES: In a systematic review of literature, reviewing abstracts twice by two reviewers improves the likelihood of correctly including relevant citations and excluding irrelevant ones. During the second abstract review, the reviewer has had more exposure to the literature, and thus may be more accurate than the first reviewer. A statistical model was fitted to determine between-reviewer and between-review reliability and variation. **METHODS:** Inclusion/exclusion decisions made by two reviewers in the abstract review stage of six recently conducted clinical and economic systematic reviews were analysed in the context of the final inclusion/exclusion decision. For the first and second reviewers, sensitivity (the proportion of correctly included citations) and specificity (the proportion of correctly excluded citations) were modelled using bayesian poisson regression. **RESULTS:** Across one economic and five clinical systematic reviews, the sensitivity of reviewer one ranged from 82% to 95%; the second reviewer's sensitivity ranged from 80% to 98%. The specificity of reviewer one ranged from 94% to 98%; the second reviewer's specificity ranged from 92% to 99%. The pattern of results varied substantially between reviews. In the breast cancer, hyperlipidemia, and anaesthesia reviews, the

second reviewer was up to 3% more sensitive than the first. In the ovarian cancer, anti-infectives, hyperlipidemia, and clinical breast cancer reviews, the second reviewer was up to 2% more specific than the first; all were significant differences apart from the clinical breast cancer review. In the cases where the second reviewer was less sensitive or specific than the first, these differences were non-significant. **CONCLUSIONS:** While first and second reviewers tend to have similar sensitivity in including citations, second reviewers tend to be more accurate at excluding citations. This may be explained by the fact that, since more caution is exercised in excluding citations than including them, reviewers may wait until they have gained sufficient experience to make this decision.

MENTAL HEALTH—Clinical Outcomes Studies

PMHI

PREVALENCE OF TIC DISORDERS AND COEXISTENCE WITH ATTENTION-DEFICIT/HYPERACTIVITY DISORDER (ADHD) IN A GERMAN COMMUNITY SAMPLE

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OBJECTIVES: To determine 12-months administrative prevalence rate of tic disorders (TD) and Tourette syndrome (TS), as well as their coexistence with ADHD in a large German community sample, against the background of the clinical importance of this association. **METHODS:** Data for patients with a diagnosis of any tic disorder (F95, ICD-10), Tourette disorder (F95.2), or ADHD (F90.0 and/or F90.1) were extracted from the Nordbaden claims database, covering the complete subpopulation insured by Statutory Health Insurance (2.238 million lives in 2003; for comparison: total German population insured by SHI in 2003, 70.2 million) in Nordbaden in South-Western Germany (representing 82% of the total regional population). **RESULTS:** A total of 3,618 patients with a diagnosis of any TD (hereof, 215 with TS) and 11,875 patients with ADHD were identified, corresponding to overall administrative prevalence rates (across all age groups) of 0.16% (TD), 0.01% (TS), and 0.53% (ADHD). Males were generally more often afflicted with any of the disorders analyzed than females (TD, 0.19% versus 0.13% for females; TS, 0.02% versus 0.01%; ADHD, 0.83% versus 0.27%). TD and TS were most prevalent among children 7–12 years (0.79% and 0.04%, respectively), and were significantly associated with presence of ADHD. ADHD was reported in 11.2% of children age ≤12 years with TD (boys, 15.4%; girls, 4.5%), compared to 3.1% (boys, 4.4%; girls, 1.7%) in the community covered. Among adolescents (age 13–18 years), a diagnosis of ADHD was tenfold more likely in patients with TD (15.1%; boys, 18.5%; girls, 7.7%) compared with the community group (1.5%; boys, 2.3%; girls, 0.7%). **CONCLUSIONS:** These data extend the epidemiological database by providing for the first time information from Germany on the administrative prevalence of TD, TS, and ADHD, as well as their coexistence, hereby highlighting the relevance of taking comorbidity into account when designing health care utilization and burden of disease studies.

PMH2

DIRECT AND INDIRECT TREATMENT EFFECTS ON SLEEP DISTURBANCE IN GENERALIZED ANXIETY DISORDER: A STATISTICAL MEDIATION MODEL ANALYSIS

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OBJECTIVES: The majority (50–80%) of patients with generalized anxiety disorder (GAD) suffer from a variety of sleep problems. The objective of this study was to measure the direct effect of anxiolytic treatment and, separately, its indirect effect mediated by anxiety symptoms on sleep disturbance in patients with GAD. **METHODS:** Data were obtained from an 8-week, double-blind, randomized, flexible-dose, placebo- and active-control study in 372 GAD patients. Patients were assigned to pregabalin (300–600 mg/day), venlafaxine XR (75–225 mg/day), or placebo. Anxiety symptoms were measured by clinician-administered HAM-A scale at baseline and on weeks 1–4, 6, and 8 and sleep disturbances were measured using the 4-item sleep disturbance subscale on Medical Outcomes Study Sleep Scale (MOS-SS), a validated patient-reported outcome measure. Statistical mediation modeling was used to estimate the direct effects of pregabalin and venlafaxine XR (relative to placebo) and the indirect effects via anxiety symptoms, the mediator variable, as measured by HAM-A total score. All available data from the trial were used in the statistical analyses. **RESULTS:** Patients were predominantly female (61%) and had a mean age of 41 years. Path coefficients for direct and indirect (mediated) paths for patients in the pregabalin group indicated less sleep disturbance with treatment. Fifty-three percent of the reduction in sleep disturbance was due to the direct effect of pregabalin ($p = 0.007$). The remainder of the reduction in sleep disturbance (47%, $p = 0.015$) was mediated via anxiety symptoms. In contrast, there was no difference in sleep disturbance ($p = 0.58$) between patients treated with venlafaxine XR or placebo. **CONCLUSIONS:** The underlying relationships between treatment, anxiety symptoms, and sleep disturbance are explicitly described and partitioned through mediation modeling. About half of the total improvement in sleep disturbance was identified as being due to the direct effect of pregabalin independent of an effect on anxiety symptoms.

PMH3

RISPERIDONE LONG-ACTING INJECTION (RLAI) IN THE TREATMENT OF SCHIZOPHRENIA: 3 MONTH PRELIMINARY RESULTS FROM THE ELECTRONIC SCHIZOPHRENIA TREATMENT ADHERENCE REGISTRY (E-STAR) IN RUSSIA

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OBJECTIVES: To evaluate preliminary treatment outcomes of Russian patients enrolled in the electronic-Schizophrenia Treatment Adherence Registry (e-STAR) followed up for three months after initiating treatment with risperidone long-acting injectable (RLAI). **METHODS:** e-STAR is an international, prospective, observational study of schizophrenia patients initiated on RLAI. Psychiatric hospitalizations and medication use are collected retrospectively for one year and prospectively every three months for two years. Clinical and functioning outcomes, which are measured by the Clinical Global Impression Severity (CGI-S) Scale and the Global Assessment of Functioning (GAF) Scale, respectively, are assessed prospectively every three months for two years. McNemar's test and paired-t test were used to evalu-